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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,100	12/17/2001	Hengchen Lin	Mo6853/MD-00-121-PF	2364

157 7590 12/18/2002

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EXAMINER
CLARDY, S

ART UNIT	PAPER NUMBER
1616	

DATE MAILED: 12/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
10/023,100	Lin et al
Examiner	**Art Unit**
S. Mark Clardy	1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on Dec 17, 2001 .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-22 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 1-22 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

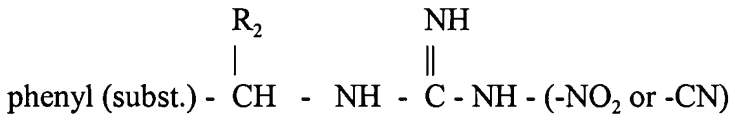
Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

Claims 1-22 are pending in this application.

Applicants' claims are drawn to compositions, and methods of using them for plant defoliation (claims 1-9) and inhibition of cotton leaf regrowth using guanidine compounds alone (claims 10, 11, 13, 14), or in combination with additional agents (claims 12, 15-18), the compositions comprising:

1. Nitroguanidine or cyanoguanidine[1]:



2. A second component: herbicides[2], adjuvants, PGRs, desiccant, boll opening compounds, pesticides, fertilizers, non-guanidine defoliants.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 3, it appears that the word "concentration" should read -- concentrate --.

OK It is not seen how the terms "crop oil [concentrate]" and "vegetable oil concentrate" are appropriately used as adjuvants, along with ammonium sulfate. Crop oil concentrates are

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[1]Claim 13: 1-(α-ethylbenzyl)-3-nitroguanidine, (+) and (-) isomers thereof

[2]Claims 1, 15: thidiazuron, diuron, ethephon, PPO inhibiting herbicides, ammonium sulfate

conventional types of agricultural formulations. It would appear more appropriate to amend lines 2+ to read:

-- compound is in the form of a crop oil concentrate comprising the [a] guanidine compound an adjuvant selected from vegetable oil, ammonium sulfate, and combinations thereof.--

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 10-12, 14, 19, and 20 are rejected under 35 U.S.C. 102(a), (b), and (e) as being anticipated by Arotin et al (US 4,639,268).

Arotin et al teach the utility of applicants' nitro- and cyanoguanidines (see Examples 1 and 2) for desiccating and defoliating cotton plants, inducing the plants to shed their leaves and inhibit regrowth (col 5, lines 13-23; claims 7-10) and that various adjuvants could be used in customary formulations, some in amounts less than 1% (col 8, lines 23-69). Additional active agents may be combined with the guanidine compounds, including N-(substituted phenyl)-N-1,2,3-triadiazole-5-yl ureas (note that thidiazuron is within this class of compounds, but not explicitly disclosed), and other insecticidal and fungicidal agents (columns 5-8).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

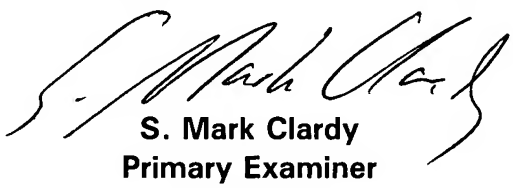
Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arotin et al.

As noted, thidiazuron is within the limited class of N-(substituted phenyl)-N-1,2,3-triadiazole-5-yl ureas, disclosed as being useful in combination with the guanidine compounds, thus it would have been obvious to have used this specific compound as claimed herein.

No unobvious or unexpected results are noted; no claim is allowed. There does not appear to be any significant differences between the results for compositions comprising applicants' EBNG as the sole active ingredient (also as taught by Arotin et al), and the compositions comprising additional active agents.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103c and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is (703) 308-4550.



S. Mark Clardy
Primary Examiner
AU 1616

December 13, 2002